

**IN THE CLAIMS:**

Claims 1, 10, 19, 24, 29, 33-34, 36, 38-42, and 51 are amended herein. Claim 52 is added. All pending claims and their present status are produced below.

1           1.       (currently amended) A wireless communications system comprising:  
2                   a transmitter circuit for transmitting information and configured to repeatedly  
3                   ~~generating a same~~ random identifier code having randomness that is  
4                   derived from tolerances associated with components included in the  
5                   transmitter circuit, wherein the random identifier code is included in  
6                   the transmitted information.

1           2.       (original) The system of claim 1 wherein the transmitter circuit includes a  
2                   microcontroller unit having a first I/O port, wherein in response to a code generating  
3                   event being detected at the first I/O port, a process running in the microcontroller unit  
4                   generates the random identifier code.

1           3.       (original) The system of claim 2 wherein the microcontroller unit includes  
2                   a ROM for storing a set of instructions for carrying out the process.

1           4.       (original) The system of claim 2 wherein the microcontroller unit includes  
2                   a RAM for storing the random identifier code generated by the process.

1           5.       (original) The system of claim 2 wherein the microcontroller unit includes  
2                   an N-bit timer having an output value that is read in response to the code generating event  
3                   being detected at the first I/O port.

1           6.       (original) The system of claim 5 wherein the output value of the N-bit  
2                   timer is the random identifier code.

1           7.       (original) The system of claim 5 wherein the output value of the N-bit  
2                   timer is applied to a random code generator algorithm stored in a ROM of the

3 microcontroller unit, the random code generator algorithm for generating the random  
4 identifier code.

1 8. (original) The system of claim 1 wherein the transmitter circuit further  
2 includes a storage area for storing the random identifier code.

1 9. (original) The system of claim 1 wherein the transmitter circuit is included  
2 in one of a wireless mouse, a wireless keyboard, a wireless joystick, a wireless trackball,  
3 a wireless video camera and a receiver unit for receiving communications of a wireless  
4 device.

1 10. (currently amended) A wireless communications system comprising:  
2 a transceiver circuit for transmitting ~~and receiving~~ information, and for  
3 repeatedly generating a same random identifier code having  
4 randomness that is derived from tolerances associated with  
5 components included in the transceiver circuit, wherein the random  
6 identifier code is included in the transmitted information.

1 11. (original) The system of claim 10 wherein the transceiver circuit includes  
2 a microcontroller unit having a first I/O port, wherein in response to a code generating  
3 event being detected at the first I/O port, a process running in the microcontroller unit  
4 generates the random identifier code.

1 12. (original) The system of claim 11 wherein the microcontroller unit  
2 includes a ROM for storing a set of instructions for carrying out the process.

1 13. (original) The system of claim 11 wherein the microcontroller unit  
2 includes a RAM for storing the random identifier code generated by the process.

1 14. (original) The system of claim 11 wherein the microcontroller unit  
2 includes an N-bit timer having an output value that is read in response to the code  
3 generating event being detected at the first I/O port.

1 15. (original) The system of claim 14 wherein the output value of the N-bit  
2 timer is the random identifier code.

1 16. (original) The system of claim 14 wherein the output value of the N-bit  
2 timer is applied to a random code generator algorithm stored in a ROM of the  
3 microcontroller unit, the random code generator algorithm for generating the random  
4 identifier code.

1 17. (original) The system of claim 10 wherein the transceiver circuit further  
2 includes a storage area for storing the random identifier code.

1 18. (original) The system of claim 10 wherein the transceiver circuit is  
2 included in one of a wireless mouse, a wireless keyboard, a wireless joystick, a wireless  
3 trackball, a wireless video camera and a receiver unit for receiving communications of a  
4 wireless device.

1 19. (currently amended) A method for distinguishing transmissions of a  
2 wireless transmitter, the method comprising:

3 generating a random identifier code having randomness that is derived from  
4 tolerances associated with components included in the wireless  
5 transmitter, the code being the same as a previously generated code  
6 having randomness from tolerances associated with components  
7 included in the wireless transmitter; and

8 embedding the random identifier code in the transmissions of the wireless  
9 transmitter.

1 20. (original) The method of claim 19 further comprising:  
2 storing the random identifier code in a storage area in the wireless transmitter.

1 21. (original) The method of claim 19 wherein the wireless transmitter  
2 includes a microcontroller unit having an I/O port, and the generating step is responsive  
3 to a code generating event being detected at the I/O port.

1           22. (original) The method of claim 21 wherein the microcontroller unit  
2 includes a ROM for storing a set of instructions, and the generating step is carried out  
3 pursuant to the instructions.

1           23. (original) The method of claim 19 wherein the wireless transmitter is  
2 included in one of a wireless mouse, a wireless keyboard, a wireless joystick, a wireless  
3 trackball, a wireless video camera and a receiver unit for receiving communications of a  
4 wireless device.

1           24. (currently amended) A method for distinguishing transmissions of a  
2 transceiver included in a wireless communications system, the method comprising:

3           generating a random identifier code having randomness that is derived from  
4           tolerances associated with components included in the transceiver; and  
5           embedding the random identifier code in the transmissions of the transceiver,  
6           the code being the same as a previously generated code having  
7           randomness from tolerances associated with components included in  
8           the wireless communications system.

1           25. (original) The method of claim 24 further comprising:  
2           storing the random identifier code in a storage area in the wireless transmitter.

1           26. (original) The method of claim 24 wherein the wireless transmitter  
2 includes a microcontroller unit having an I/O port, and the generating step is responsive  
3 to a code generating event being detected at the I/O port.

1           27. (original) The method of claim 26 wherein the microcontroller unit  
2 includes a ROM for storing a set of instructions, and the generating step is carried out  
3 pursuant to the instructions.

1           28. (original) The method of claim 24 wherein the transceiver is included in  
2 one of a wireless mouse, a wireless keyboard, a wireless joystick, a wireless trackball, a

3 wireless video camera and a receiver unit for receiving communications of a wireless  
4 device.

1 29. (currently amended) A computer-readable medium having instructions  
2 stored thereon which, when executed by a processor included in a wireless  
3 communications system, cause the processor to perform the steps of:

4 responsive to a code generating event, receiving data produced by the wireless  
5 communications system, wherein the received data has randomness  
6 that is derived from tolerances associated with components included in  
7 the wireless communications system;

8 generating a random identifier code based on the received data; and

9 storing the random identifier code in a storage area included in the wireless  
10 communications system, the code being the same as a previously  
11 generated code having randomness from tolerances associated with  
12 components included in the wireless communications system.

1 30. (original) The computer-readable medium of claim 29, wherein the steps  
2 performed by the processor further comprise:

3 embedding the random identifier code in transmissions of the wireless  
4 communications system.

1 31. (original) The computer-readable medium of claim 29 wherein the  
2 wireless communications system includes a microcontroller unit having an I/O port, and  
3 the code generating event is detected at the I/O port.

1 32. (allowed) A method for distinguishing transmissions of a wireless  
2 communications device, wherein the wireless communications device has a  
3 microcontroller unit having an I/O port coupled to an RC circuit having an output voltage  
4 that can be monitored by the I/O port, the method comprising:

5 responsive to a triggering event, commanding the I/O port of the  
6 microcontroller unit from a high impedance state to a low voltage state  
7 thereby discharging the RC circuit;  
8 resetting and starting an N-bit timer of the microcontroller unit, the N-bit  
9 timer having an output;  
10 commanding the I/O port from the low voltage state to the high impedance  
11 state thereby charging the RC circuit;  
12 monitoring the output voltage of the RC circuit at the I/O port;  
13 responsive to the output voltage at the I/O port reaching a threshold voltage,  
14 reading the output of the N-bit timer;  
15 generating from the read output of the N-bit timer a random identifier code;  
16 and  
17 embedding the random identifier code in transmissions of the wireless  
18 communications device.

1 33. (original) A wireless communications system comprising:  
2 a transmitter circuit for transmitting information and configured to repeatedly  
3 ~~generating a~~ same random identifier code having randomness that is  
4 derived from tolerances associated with components included in the  
5 transmitter circuit, wherein the random identifier code is included in  
6 the transmitted information; and  
7 a receiver circuit for, responsive to received information having the random  
8 identifier code, reporting that received information to a receiver host.

1 34. (original) An electronic communication system for generating a random  
2 identifier code, the system comprising:  
3 a first circuit for communicating information and configured to repeatedly  
4 ~~generating a~~ same random identifier code having randomness that is  
5 derived from tolerances associated with components included in the  
6 first circuit; and

7 a second circuit communicatively coupled to the first circuit, the second  
8 circuit for receiving the information communicated by first circuit,  
9 wherein the information includes the random identifier code.

1 35. (original) The system of claim 34 wherein the first circuit and the second  
2 circuit each have a storage area for storing random identifier code.

1 36. (original) A method for associating a transmitter with a receiver, wherein  
2 the transmitter and the receiver are part of a wireless communications system, the method  
3 comprising:

4 generating a random identifier code having randomness that is derived from  
5 tolerances associated with components included in the wireless  
6 communications system, the code being the same as a previously  
7 generated code having randomness from tolerances associated with  
8 components included in the wireless communications system; and

9 assigning the random identifier code to the transmitter and the receiver  
10 thereby creating a transmitter-receiver pair.

1 37. (original) The method of claim 36 further comprising:

2 storing the random identifier code in a storage area in the transmitter; and

3 storing the random identifier code in a storage area in the receiver.

1 38. (currently amended) A wireless communications transmitter system  
2 comprising:

3 a transmitter circuit means for transmitting information and for repeatedly  
4 generating the same a-random identifier code having randomness that  
5 is derived from tolerances associated with components included in the  
6 transmitter circuit means, wherein the random identifier code is  
7 included in the transmitted information.

1 39. (currently amended) A wireless communications system comprising:

2 a transceiver circuit means for transmitting and receiving information, and for  
3 repeatedly generating the same a random identifier code having  
4 randomness that is derived from tolerances associated with  
5 components included in the transceiver circuit means, wherein the  
6 random identifier code is included in the transmitted information.

1 40. (currently amended) A method for distinguishing transmissions of a  
2 wireless transmitter means, the method comprising:

3 generating a random identifier code having randomness that is derived from  
4 tolerances associated with components included in the wireless  
5 transmitter means, the code being the same as a previously generated  
6 code having randomness from tolerances associated with components  
7 included in the wireless transmitter means; and

8 embedding the random identifier code in the transmissions of the wireless  
9 transmitter means.

1 41. (currently amended) A method for distinguishing transmissions of a  
2 transceiver means included in a wireless communications system, the method comprising:

3 generating a random identifier code having randomness that is derived from  
4 tolerances associated with components included in the transceiver means,  
5 the code being the same as a previously generated code having  
6 randomness from tolerances associated with components included in the  
7 wireless communications system; and

8 embedding the random identifier code in the transmissions of the transceiver  
9 means.

1 42. (currently amended) A wireless communications system comprising:

2 a receiver circuit for receiving information and detecting a random identifier code  
3 generated by a communication circuit having randomness that is derived  
4 from tolerances associated with components included in athe  
5 communication circuit, wherein the random identifier code is included in



6 the received information, and wherein the communication circuit is  
7 configured to repeatedly generate the same random identifier code.

1 43. (previously amended) The system of claim 42, wherein the communication  
2 circuit comprises a transmitter for sending the received information and for including the  
3 random identifier code in the information.

1 44. (previously amended) The system of claim 42, wherein the communication  
2 circuit comprises the receiver circuit.

1 45. (previously amended) The system of claim 44 wherein the receiver circuit  
2 includes a microcontroller unit having a first I/O port, wherein in response to a code  
3 generating event being detected at the first I/O port, a process running in the  
4 microcontroller unit generates the random identifier code.

1 46. (previously amended) The system of claim 45 wherein the microcontroller  
2 unit includes a ROM for storing a set of instructions for carrying out the process.

1 47. (previously amended) The system of claim 45 wherein the microcontroller  
2 unit includes a RAM for storing the random identifier code generated by the process.

1 48. (previously amended) The system of claim 45 wherein the microcontroller  
2 unit includes an N-bit timer having an output value that is read in response to the code  
3 generating event being detected at the first I/O port..

1 49. (previously amended) The system of claim 48 wherein the output value of  
2 the N-bit timer is the random identifier code.

1 50. (previously amended) The system of claim 48, further comprising a ROM  
2 for storing a set of instructions for carrying out the process and wherein the output value  
3 of the N-bit timer is applied as an input to the process stored in the ROM.

1           51. (currently amended) The system of claim 42, wherein the receiver circuit is  
2 included in a device that possess the ability to transmit ~~and receive~~ signals via wireless  
3 communication technology, the device associated with one of a computer motherboard, a  
4 wireless mouse, a wireless keyboard, a wireless joystick, a wireless trackball, and a wireless  
5 video camera.

1           52. (new) The wireless communications system of claim 1, wherein the random  
2 identifier code is unique to the circuit and associated with the specific tolerance values of  
3 components in the circuit